

# Introduction and Overview UNSPSC

United Nations Standard Products and Services Code



## Agenda

- What is UNSPSC?
- Value of Implementing the UNSPSC
- Success Stories
- How to Implement the UNSPSC
- Realizing the Benefits
- How to Get Started
- Membership
- Conclusions



## Can you answer these questions?

- How much do we spend?
- On which products?
- From which suppliers?

...inadequate spending analysis capabilities are costing businesses \$260 billion in missed savings opportunities annually.

Aberdeen Group, "The Spending Analysis Benchmark Report: Dissecting a Corporate Epidemic", January 2003



#### What is the UNSPSC?

- "United Nations Standard Products and Services Code"
- An open standard
- A taxonomy of products and services
- A practical business tool



## Define: Open Standard

- Publicly available specifications for solving a certain problem
- Not proprietary
  - Available to all to read and implement
  - No royalty or license fees for usage
  - No restrictions on sharing codes with trading partners
  - No lock-in to one commercial solution
- Do not discriminate or favor; level, neutral playing field
- Participation in development is open and transparent
- Decisions are made on a consensus basis
- Not to be confused with "open source" software



## Define: Taxonomy

- A system of classification, in this case, of products and services bought and sold
- A hierarchical tree structure, which enables "drill down" and "roll up" analysis
- A practical tool, responsive to user needs
- Use in Enterprise Resource Planning, e-Commerce, Business Intelligence systems

## **Example: Biology**

Purpose: to enable collaborative science

```
"root" = All Living Things (typically, the root is implied)
     Kingdom (Animals, Plants, Fungi, Bacteria...)
         Phylum (Vertebrates, Mollusks, Arthropods...)
             Class (Mammals, Fish, Reptiles, Birds...)
                 Order (Carnivores, Primates, Ungulates...)
                    Family (Cats, Dogs, Bears, Seals...)
                       Genus (Felis, Lynx, Panthers...)
                          Species (Felis silvestris catus)
```

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Felis silvestris catus

### Example: UNSPSC

Purpose: to enable collaborative commerce

"root" = All Products and Services (implied)

Segment 44 Office Equipment and Accessories and Supplies

Family 10 Office machines and their supplies and accessories

Class 15 Duplicating machines

**Commodity 01 Photocopiers** 

Class 31 Printer and facsimile and photocopier supplies

**Commodity 03 Toner** 







## Advantages of UNSPSC

- The UNSPSC is available in 10 languages:
  - Chinese, Dutch, English, French, German, Italian, Japanese, Korean, Portuguese and Spanish
  - Standard codes eliminate ambiguity
- Segments exist for:
  - raw materials
  - industrial equipment
  - components and supplies
  - end-use products
  - services
- Comprehensive: over 20,000 categories
- Responsive to the marketplace



## Avoid Expense of Developing Your Own Classification System

- Typical home-grown coding systems take a year or more to develop – you can download the complete UNSPSC today
- Avoid duplicated effort, where every trading partner codes differently



## **UNSPSC** Design

- Hierarchical 4-level tree structure: Segment, Family, Class and Commodity
  - Note: "Commodity" is **not** defined as bulk materials but in the broader sense as <u>any article of commerce</u> including capital equipment, high-value products, and professional services.
- Category titles are unambiguous and mutually exclusive
- Products appear in only one category; categories each have only have one parent
- Products are grouped according to dominate usage in world market



## **UNSPSC** Components

- UNSPSC Code: 8 digits, e.g. 44103103
- Title: natural language text up to 120 characters long, e.g. "Toner"
- **Definition**: free form text gives concise explanation
- Business Function: 2-digit codes for Rental or Lease, Maintenance or Repair, Manufacturer, Wholesale, Retail, Recycle, Installation (optional to use)



#### **UNSPSC Code Structure**

Segment **44**000000 Office Equipment and Accessories and Supplies

Family 44**10**0000 Office machines and their supplies and accessories

Class 4410**31**00 Printer and facsimile and photocopier supplies

Commodity 441031**03** Toner

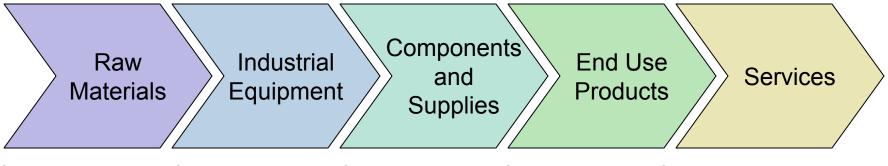


**44103103** = *Toner* 



## **UNSPSC Segments**

The 55 Segments are arraigned in a logical sequence that reflects how value is progressively added to products.



Segments 10-15 Segments 20-27 Segments 30-41 Segments 42-60 Segments 70-94

Family, Class and Commodity codes are arbitrary, and reflect no logical sequence.

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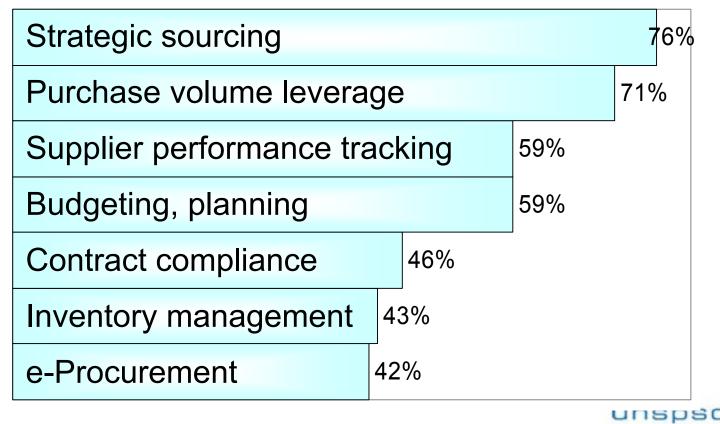
# Value of Implementing the UNSPSC

- Automate the gathering and analyzing of spend data
- Provide a uniform, enterprise-wide view of spend
- "Roll up" analysis identifies contractible groups, opportunities for strategic vendor relationships
- Centralize procurement function, leverage volume for better pricing
- Collaborate with Customers or Suppliers through use of a common classification system

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- Control maverick spend: reduce off-contract spend at higher prices
- Reduce inventory through product standardization

# The Chief Reasons Organizations Implement Spend Analysis



## Value for Suppliers

- Facilitate sales function, particularly through Internet exchanges
- Qualify as preferred supplier to customers with eprocurement initiatives
- Speed new product introductions using Web services, XML, etc.
- Facilitate globalization of your business
- Collect consistent sales data across channels, regions
- Collaborate with customers to improve contract compliance, increasing the supplier's market share – a win-win



- After benchmarking other companies, Microsoft selected the UNSPSC as its standard commodity classification system. The procurement team was looking for a coding system that it could use not only to classify spend, but also to communicate with its trading partners. Developing an internal system, said Don Jones, general manager, corporate procurement, "would hamper our ability to communicate through our e-procurement system with our supply base." The company's hardware suppliers all use the same version of the UNSPSC code.
- Use of MS Spend has cut weeks, if not months, out of the spend analysis process.
- Using data to cut spend by \$1.4 billion in FY05



- PPG Industries captured more than 95% of its spend (more than \$5 billion) from 23 data sources in a centralized staging database before driving it to a spend analysis tool.
- Indirect materials are classified with UNSPSC codes
- More than 10% savings and 90% supplier reduction



- Consumer products company reported slashing bids by as much as 90% after consolidating and analyzing over \$30 billion worth of purchases from 50 different A/P systems.<sup>1</sup>
- Manufacturer of cutting tools saved over \$1 million on \$800 million in "quick hit" negotiations by applying the lessons learned after merging Accounts Payable, Purchase Order and Purchasing Card data. 1



<sup>1.</sup> Adopting UNSPSC, Zycus Inc.

- Cabinetry manufacturer lowered the costs of purchased materials, with a projected year-overyear savings of 2% to 4%, by consolidating spend data across five divisions. <sup>1</sup>
- A hospital negotiated a 14% discount on coronary stents worth \$600,000 annually after analyzing spend and standardizing on one supplier. <sup>2</sup>
- 1. Adopting UNSPSC, Zycus Inc.
- 2. A UNSPSC® Success Story, 2005, Coalition for Healthcare eStandards, Inc. (CHeS)

## How to Implement UNSPSC

- Classify products: enter the appropriate 8digit UNSPSC Code against each item in your system
- Store the UNSPSC Titles in a look-up table
- If a code for your product does not exist, temporarily use the parent category and submit a request for a new code

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#### Add UNSPSC Code to Each Item

<u>ltem#</u>	<u>Brand</u>	<u>Name</u>	<u>Unit</u>	UNSPSC
12345	Brand®	Copy paper, 8 1/2" X 11", White, 20lb, 10 Reams	CS	
23456	Brand®	Retractable Ballpoint Pens, 1.0 mm, Medium Point, Black Barrel, Black Ink, Box Of 12	ВХ	
34567	Brand®	Color LaserJet Black Toner Cartridge	EA	
45678	Brand®	15' Extension Cord, 3 Conductors, 3 Outlets, Gray	EA	



#### Add UNSPSC Code to Each Item

<u>ltem#</u>	<u>Brand</u>	<u>Name</u>	<u>Unit</u>	UNSPSC
12345	Brand®	Copy paper, 8 1/2" X 11", White, 20lb, 10 Reams	cs	14111507
23456	Brand®	Retractable Ballpoint Pens, 1.0 mm, Medium Point, Black Barrel, Black Ink, Box Of 12	ВХ	44121704
34567	Brand®	Color LaserJet Black Toner Cartridge	EA	44103103
45678	8 Brand® 15' Extension Cord, 3 Conductors, 3 Outlets, Gray		EA	26121536



## **New Category Step 1**

50000000 Food Beverage and Tobacco Products

50100000 Fruits and vegetables and nuts and seeds

50101800 Fresh citrus fruits

50101804 Lemon fruit

50101809 Orange fruit

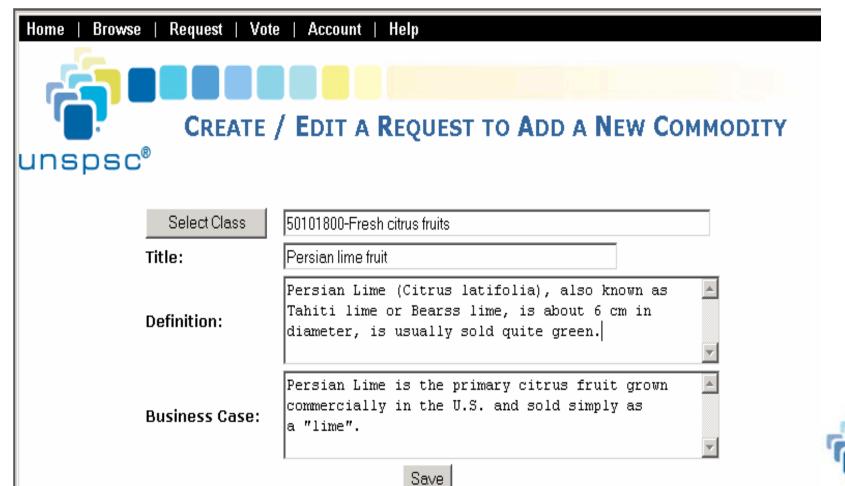
50101805 Key lime

501018?? Persian lime fruit ??

Temporarily classify the items under the missing category's logical parent. Then submit proposal to add a new category.



## New Category Step 2



### Resources Needed

- Familiarity with products
  - Recognize product despite extreme abbreviations
  - Electrical <u>lead</u> or Pencil <u>lead</u>?
- Familiarity with the taxonomy
- Basic understanding of principles of classification
- Allocated staff or outsource



## Options for Classifying Items

- Have requisitioners select category up front in e-Procurement system
- Manual in-house
  - Pros: low initial cost; immediate results for small volumes; use existing office software; maximize 'ownership' and detailed knowledge of data
  - Cons: not scalable; less consistent; requires personnel commitment
- Classification software
  - Pros: <u>semi</u>-automates the process; improves quality, consistency and productivity over manual; flexible, customizable; maximum insight
  - Cons: requires personnel commitment; longer to implement; slower ROI

## Options for Classifying Items

#### Outsource

- Pros: service providers have software and experienced specialists, scalable at lower total cost
- Cons: security, less 'ownership' of data, lock in to solution, less flexible

#### Hybrid or Phased

- Outsource initial high-cost pass through data, learn, transition to in-house maintenance
- Avoid locking in some of the disadvantages



#### Recommendations

- Plan for larger initial investment followed by smaller ongoing maintenance costs
- If core competency: investigate automation software and building in-house expertise
- Combine with other data enhancements
- Poor product descriptions are the #1 challenge to accurate and efficient classification

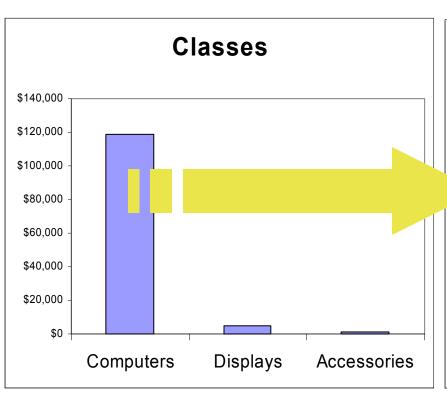


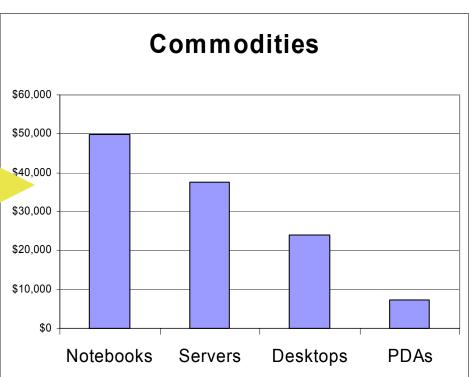
## Realizing the Benefits

- <u>Drill down</u> to focus your attention on the categories that represent the most spend
- Roll up to identify 'contractible groups', reduce the number of vendors
- Use with decision support tools
  - Regular periodic reports, to monitor and alert
  - Ad hoc, to identify new savings opportunities

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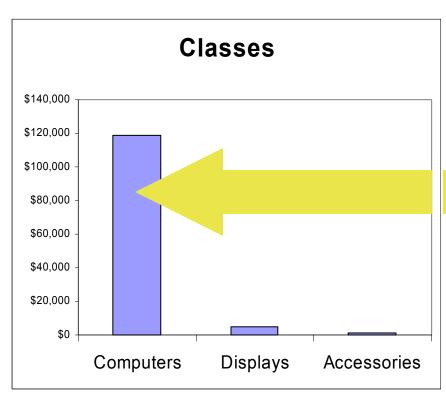
### Drill Down

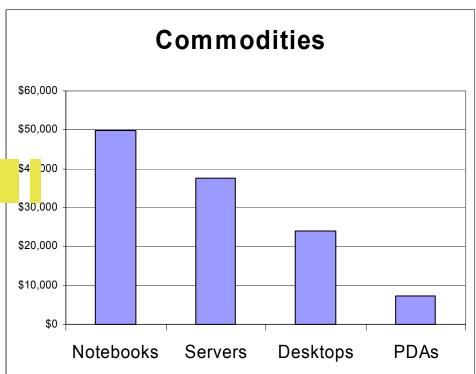






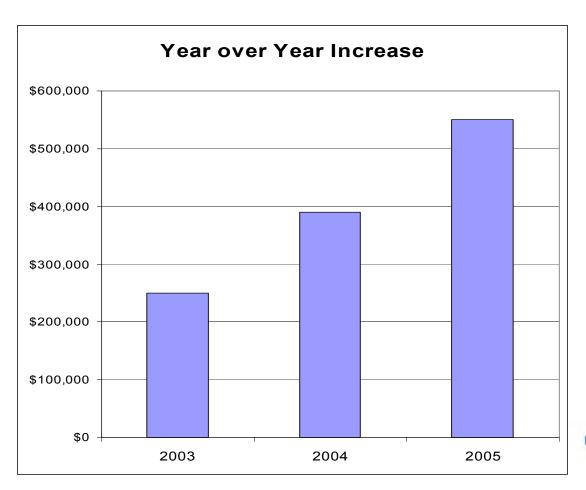
## Roll Up







## Analyze Spend Over Time





## Extending to Product Attributes

43000000 Information Technology Broadcasting and

**Telecommunications** 

43200000 Components for information technology or broadcasting or telecommunications

43201800 Media storage devices

43201803 Hard disk drives

#### Industry- or company-specific extension beyond the UNSPSC standard

Product Name	Access Time	Bit Rate	Rotational Speed	Seek Time	Capacity	Height	Width	Depth	Weight
HARD DISK DRIVE	300 MB/s	64.8 MB/s	7200 RPM	8.5 ms	500 GB	25.4 mm	101.6 mm	146 mm	700 g

#### How to Get Started

- Go to <u>www.unspsc.org</u> and click DOWNLOADS for current version
- Evaluate, build internal support, budget
  - Use case studies to help predict ROI
- Form Business-Unit/IT team, plan project
- Capture data, classify items
- Analyze spend, identify savings opportunities, capture savings, repeat

## Membership in UNSPSC

UNSPSC is a member-funded initiative. As a member, your company can actively improve the code to meet your business needs. Benefits of membership include:

- Submit change requests to the code
- Vote on change requests
- Participate in industry revision projects
- Download past versions of the code in multiple languages
- Download past audit files in multiple languages
- Receive unlimited helpdesk support via phone and email.
- Preferred member rates at conferences
- Receive newsletter on codeset activities
- Choose membership level to meet your needs



## Versions, votes, etc.

- There are Change Request and Voting periods each year
- 2 codeset versions are published per year
- Format: Excel spreadsheet inside a compressed Zip file



#### Conclusion

- Manage spend to improve the financial health of your organization
  - Rationalize vendors
  - Standardize products
  - Leverage volume to negotiate better pricing
  - Improve operational efficiency of purchasing function
- Start now to maximize benefits
- Join and participate to meet your business needs

## **Further Reading**

